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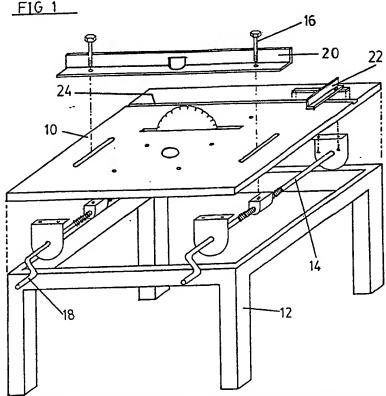
(56) Documents cited US 3832922 A US 4002094 A GB 2181092 A US 3604484 A

(58) Field of search UK CL (Edition J) B4X B5L INT CL . B23D B27B B27C B25H

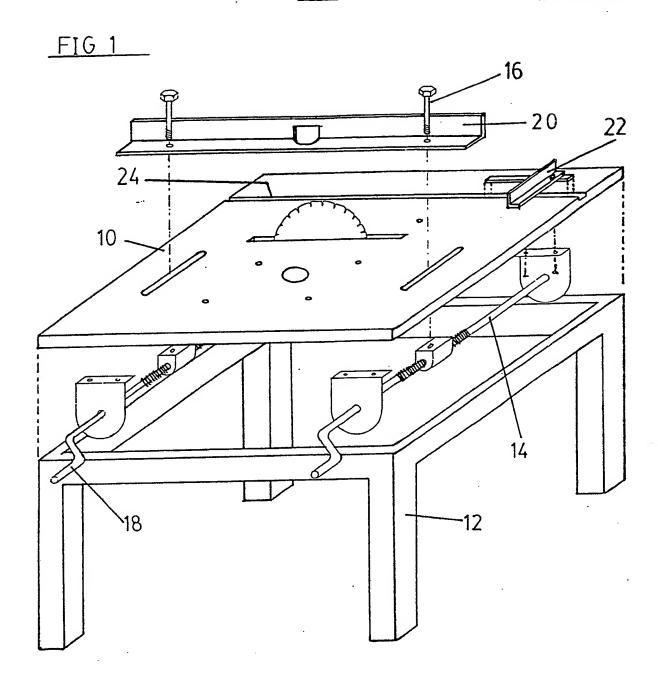
(54) Power tool table

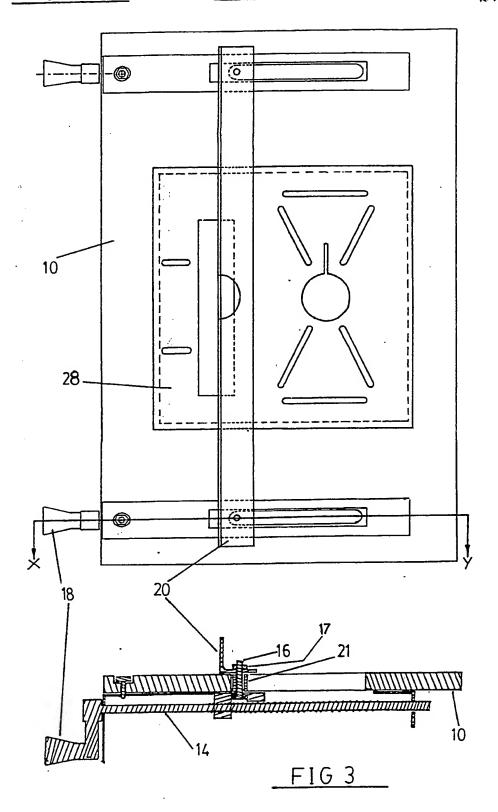
(57) To increase the efficiency of portable power tools, they may be fixed to a table and the workpiece moved through the cutters or blades of the tool. The table includes a bed plate 10 having mounted thereon a rip/moulding fence or guide 20 adjustable across the face of the table. This guide is moveable by rotation of cranked handles 18 which operate a pair of threaded shafts 14 and captive bolts suspended beneath the table. Fine adjustments of the fence position may be made to set the fence in position either parallel or at an angle to the long side of the bed plate 10. The bed plate 10 may be mounted on the base of a modified form of known workbench, the threaded shafts and cranked handles then being provided in the jaw operating mechanism of the workbench. A cross cut/mitre fence 22 runs in a slot 24.

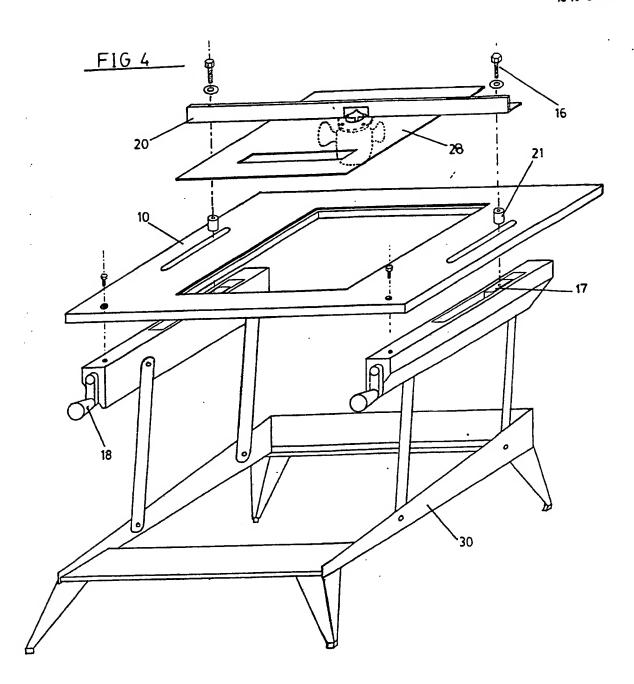
The power tools may be fixed directly to the bed plate or to a mounting plate (28, Fig. 2) fitted in the bed plate. The power tool may be a saw or a router. In a modification, the fence may be used for clamping a workpiece to enable a router to cut a slot in the workpiece using the fence as a guide for the router.



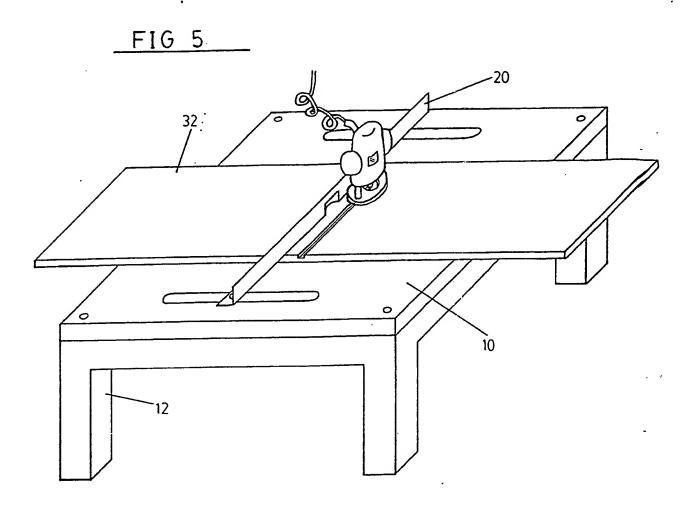
The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1982.







1 2 27 M



POWER TOOL TABLE .

This invention relates to a power tool table.

There are several makes of power tool table manufactured, each being free standing and incorporating some method of mounting electrically powered circular saws, routers, jigsaws and planers. They have workpiece fences or guides which, by a simple mechanism, enable depth and position of cut to be adjusted. Such tables are relatively expensive due to the requirement to be at waist height, and the fence or guide adjustment mechanism tends to be very primitive and relatively inaccurate.

According to the present invention, there is provided a table top for securing and supporting a workpiece, which table top is provided with a rip/moulding fence or guide, the position of which fence or guide is adjustable by means of two threaded shafts suspended beneath the table and connected to the respective ends of the fence or guide by captive bolts and nuts. The table top is also provided with means of receiving and mounting a power tool, which power tool may be fixed in position on the table top, or be movable relative to the table top. A cross cut/mitre fence or guide may also be provided, running in a shallow slot let into the upper face of the table top.

Other features of the present invention will appear from a reading of the description that follows hereafter, and from the claims appended at the end of that description.

Various embodiments of the present invention will now be described by way of example and with reference to the accompanying diagramatic drawings, in which:-

Figure 1 shows in a perspective exploded view one power tool table according to the present invention, which table top has a circular saw mounted beneath it.

Figure 2 shows in plan view a modified form of the table shown in figure 1, which modified table incorporates a removable mounting plate for receiving a power tool.

Figure 3 shows a cross section taken on the plane X-Y of figure 2.

Figure 4 shows, in a perspective exploded view, another power tool table, which table has mounted thereon a router, and which table is shown as being mounted on a modified form of a known workbench.

Figure 5 shows a table similiar to that shown in figure 1, having a sheet of timber clamped beneath the rip fence and a router being used to cut a slot in the upper face of the timber, using the rip/moulding fence or guide to direct the power tool.

Referring to the drawings, the bed plate 10 is fixed to a set of legs 12, and rotatable threaded shafts 14 are suspended below it. Captive bolts 16, engaged in nuts 17 move along the shafts by rotation of the cranked handles 18. A rip fence or guide 20 is connected to the captive bolts via guide bushes 21 and may be moved across the face of the bed plate and set in position either parallel, or at an angle, to the long side of the bed plate. A cross cut/mitre fence or guide 22 runs in a slot 24 and may be set at any angle to it. Power tools may be fixed directly to the bed plate as shown in figure 1, or to a separate mounting plate 28 as shown in figures 2,3 and 4, which mounting plate is fitted into the bed plate so as to leave a flat upper surface. Instead of standing on its own legs as shown in figure 1, the bed plate may be mounted on to the side frames of a portable work-bench such as the Black and Decker 'Workmate' 230 as shown in figure 4. In which case the threaded shafts 14, captive bolts 16 and nuts 17 are provided as part of the jaw operating mechanism of the 'Workmate'.

An alternative method of use of such table tops is to use the rip/moulding fence 20 and its fixing bolts to hold down a sheet or length of timber 32 and to enable a power tool such as the router shown in figure 5 to cut a slot or housing, using the fence 20 as a guide for the power tool.

CLAIMS

- 1 A power tool table to which various power tools may be releasably secured and incorporating one or more adjustable guides, the movement of which being finely adjustable by operation of two threaded shafts.
- 2 A power tool table as claimed in claim 1 whereas the two threaded shafts may be rotated by operation of two cranked handles either together or independently of one another to adjust the position of a rip/moulding fence or guide.
- 3. A power tool table as claimed in claim 1 and claim 2 wherein a removable mounting plate is provided for the attachment of power tools, this in turn being releasably secured to the bed plate.
- 4 A power tool table as claimed in any preceeding claim wherein a cross cut/mitre fence is incorporated.
- 5 A power tool table as claimed in claim2 or claim 3 wherein the rip/moulding fence may be used to secure a workpiece and a power tool then guided along the fence.
- 6 A power tool table as claimed in any preceeding claim wherein the table top may be mounted on a modified form of a known workbench (e.g. Black and Decker 'Workmate') (RTM)
- 7 A power tool table substantially as described herein with reference to figures 1 to 5 of the accompanying drawings.